

I CLAIM

1. A device adapted to provide water purified to human consumption level, and arranged for connection to a water supply, said device comprising a water purifier, a container for purified water and means for connecting said water purifier to said purified water container,

wherein said water purifier comprises

filter means adapted to remove particles present in water to be purified as obtained from said water supply, and to adsorb undesirable adsorbable material therefrom,

means allowing said filter means to be in fluid communication with said water supply on the one hand, and said container, on the other hand,

an ozone generator and means for injecting ozone into filtered water downstream of said filter means, but before introduction of said purified water into said container,

a pump arranged to draw water from said water supply, feed same to said filter means, and thereafter to said container, and

wherein said container includes

a neck portion, and a bottle adapter imperviously mounted on said neck portion and adapted for introducing purified water into said container as well as for recycling purified water to said water purifier, back to said container,

said device also comprising

an ozone destruction unit arranged to remove excess ozone that may escape from said purified water after same is introduced into said container, and

control means operative to cause the pump to draw water from said water supply and deliver purified water to said container and to inject ozone in said filtered water, and when said container has been filled with purified water, said control means operates to stop drawing from said water supply and start recycling purified water to said water purifier for further purification and redelivery into said container.

2. The device according to claim 1, wherein said water purifier comprises a three-way valve, a valve duct connecting said three-way valve to said pump, a recycling duct connecting said three-way valve to said container via said bottle adapter, and a water inlet tube in connection with said three-way valve at an inner end thereof and connectable to said water supply at the outer end thereof.

3. The device according to claim 2, wherein said filter means comprise a sediment filter to be used for removing coarser particles from said water to be purified, a pump outlet duct connecting said sediment filter to said pump, an activated charcoal filter to be used for removing particles not retained by said sediment filter and to adsorb said undesirable adsorbable material, and a pipe connection allowing transfer of pre-filtered water from said sediment filter to said activated charcoal filter.

4. The device according to claim 3, which comprises a filter outlet duct connected at one end to said activated charcoal filter and at the other end to said ozonated water duct.

5. The device according to claim 4, which comprises a venturi ozone injector mounted along said filter outlet duct between said activated charcoal filter and said other end of said filter outlet duct, and in communication with said ozone

generator, said venturi ozone injector operable to continuously deliver predetermined rates of ozone into filtered water that exits from said charcoal filter, as directed by said control means.

6. The device according to claim 5, wherein said water purifier comprises an oxygen bottle and an oxygen regulator associated therewith, and means for allowing a regulated delivery of oxygen from said oxygen bottle to said ozone generator.

7. The device according to claim 6, wherein said bottle adapter comprises a ring member shaped to be mounted over said neck portion, at least one clamp tightening mounted on said ring member to operate between an opened position wherein said ring member is easily engageable over or disengageable from said neck portion, and a closed position wherein said ring member is tightly and leaklessly engaged over said neck portion, said bottle adapter also comprising a distribution unit capable of being imperviously mounted on said ring member, said distribution unit including a level sensor adapted to indicate when said container is full of purified water thereby acting on said control means either to stop purification of water, or to initiate a recycling operation, an injection tube connected to said ozonated water duct to be used to inject purified water into said container, and a suction tube connected to said recycling duct to be used to recycle purified water to said water purifier back to said water container, said distribution unit having an inlet connector and an outlet connector, said inlet connector being connected with said ozonated water duct and in communication with said injection tube, said outlet connector being connected with said recycling duct and in communication with said suction tube.

8. The device according to claim 7, wherein said bottle adapter includes an ozone destruction unit mounted over said distribution unit and in communication with said distribution unit to remove any undesired ozone from said purified water.